[4910-13-P]

### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

14 CFR Part 39

[Docket No. FAA-2012-1314; Directorate Identifier 2012-NM-227-AD; Amendment

39-17312; AD 2012-26-51]

**RIN 2120-AA64** 

Airworthiness Directives; Airbus Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Airbus Model A318, A319, A320, and A321 series airplanes. This emergency AD was sent previously to all known U.S. owners and operators of these airplanes. This AD requires revising the airplane flight manual (AFM) to advise the flight crew of emergency procedures for addressing Angle of Attack (AoA) sensor blockage. This AD also provides for optional terminating action for the AFM revision, which involves replacing AoA sensor conic plates with AoA sensor flat plates. This AD was prompted by a report that an airplane equipped with AoA sensors installed with conic plates recently experienced blockage of all sensors during climb, leading to autopilot disconnection and activation of the alpha protection (Alpha Prot) when Mach number was increased. We are issuing this AD to prevent reduced control of the airplane.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2012-26-51, issued on December 17, 2012, which contained the requirements of this amendment.

The Director of the Federal Register approved the incorporation by reference of a certain publication identified in the AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Airbus, Airworthiness Office – EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email <a href="mailto:account.airworth-eas@airbus.com">account.airworth-eas@airbus.com</a>; Internet <a href="mailto:http://www.airbus.com">http://www.airbus.com</a>.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is in the ADDRESSES section.

Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-227-1405; fax: 425-227-1149; email: sanjay.ralhan@faa.gov.

### **SUPPLEMENTARY INFORMATION:**

#### Discussion

On December 17, 2012, we issued Emergency AD 2012-26-51, which requires revising the airplane flight manual (AFM) to advise the flight crew of emergency procedures for addressing AoA sensor blockage. This emergency AD also provides for optional terminating action for the AFM revision, which involves replacing AoA sensor conic plates with AoA sensor flat plates. This emergency AD was sent previously to all known U.S. owners and operators of these airplanes.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Emergency Airworthiness Directive 2012-0264-E, dated December 17, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information or "the MCAI"), to correct an unsafe condition for the specified products.

EASA has advised that an Airbus Model A330 airplane equipped with AoA sensors installed with conic plates recently experienced blockage of all sensors during climb, leading to autopilot disconnection and activation of the alpha protection (Alpha Prot) when Mach number was increased. Based on the results of subsequent analysis, it is suspected that these conic plates may have contributed to the event. Investigations are ongoing to determine what caused the blockage of these AoA sensors.

Blockage of two or three AoA sensors at the same angle may cause the Alpha

Prot of the normal law to activate. Under normal flight conditions (in normal law), if the

Alpha Prot activates and Mach number increases, the flight control laws order a pitch

down of the airplane that the flight crew might not be able to counteract with a side stick deflection, even in the full backward position. This condition, if not corrected, could result in reduced control of the airplane.

EASA also issued Emergency AD 2012-0258-E, dated December 4, 2012, for Airbus Model A330 and A340 airplanes to require an amendment of the AFM to ensure that flight crews apply the applicable emergency procedure.

AoA sensor conic plates of similar design are also installed on Model A320 series airplanes. Installation of these AoA sensor conic plates was required for Model A318, A319, A320, and A321 series airplanes by EASA AD 2012-0236, dated November 9, 2012 (corrected November 12, 2012). Subsequently, EASA issued AD 2012-0236R1, dated December 17, 2012, to remove the requirement to install AoA sensor conic plates.

#### **Relevant Service Information**

We reviewed Airbus A318/A319/A320/A321 Temporary Revision TR286, Issue 1.0, dated December 17, 2012, to the Airbus A318/A319/A320/A321 Airplane Flight Manual (AFM). The temporary revision provides information to advise the flight crew of emergency procedures for addressing AoA sensor blockage.

### **FAA's Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **AD Requirements**

This AD requires revising the Emergency Procedures section of the Airbus A318/A319/A320/A321 AFM to incorporate Airbus A318/A319/A320/A321

Temporary Revision TR286, Issue 1.0, dated December 17, 2012, to advise the flight crew of emergency procedures for addressing AOA sensor blockage. This AD also provides for optional terminating action for the AFM revision, which involves replacing AoA sensor conic plates with AoA sensor flat plates.

#### Interim Action

We consider this AD to be an interim measure to mitigate risks associated with the installation of AoA sensor conic plates. Further AD action might follow.

### **Clarification of Service Information References**

In the "Relevant Service Information" section of this AD and paragraph (h) of this AD, we have clarified that Airbus A318/A319/A320/A321 Temporary Revision TR286, Issue 1.0, dated December 17, 2012, is to the Airbus A318/A319/A320/A321 Airplane Flight Manual (AFM). We had not specified "to the Airbus A318/A319/A320/A321 Airplane Flight Manual (AFM)" in those locations in the emergency AD. This change does not affect AD compliance.

We have also included Airbus A318/A319/A320/A321 Temporary Revision TR286, Issue 1.0, dated December 17, 2012, to the Airbus A318/A319/A320/A321 AFM in paragraph (l)(2) of this AD, which specifies references for related information. We had not listed the temporary revision in the corresponding paragraph of the emergency AD (paragraph (l)(3) of the emergency AD). This change does not affect AD compliance.

We incorrectly referred to a service bulletin number as "Airbus Mandatory Service Bulletin A320-32-1521, dated . . ." in the "Differences Between the AD and the MCAI or Service Information" section in the preamble of the emergency AD. The correct service bulletin reference is "Airbus Mandatory Service Bulletin A320-34-1521, dated . . ." That reference is correct in the regulatory section of the emergency AD. We have revised the "Differences Between the AD and the MCAI or Service Information" section of this AD accordingly. This change does not affect AD compliance.

#### Differences Between the AD and the MCAI or Service Information

The applicability of EASA Emergency AD 2012-0264-E, dated December 17, 2012, is limited to airplanes having an AoA sensor conic plate installed either in production or in service. However, this emergency AD applies to all of the affected airplane models; and this AD prohibits installation of an AoA sensor conic plate in service as specified in Airbus Mandatory Service Bulletin A320-34-1521, dated May 7, 2012; and Revision 01, dated September 12, 2012; on any airplane as of the effective date of this AD.

#### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because we received a report indicating that an airplane equipped with AoA sensors installed with conic plates recently experienced blockage of all sensors during climb, leading to autopilot disconnection and activation of the alpha protection (Alpha Prot) when Mach number was increased. This condition could result in reduced control of the airplane. Therefore, we find that notice and opportunity for prior public comment are impracticable and that good cause exists for making this amendment effective in less than 30 days.

#### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2012-1314 and Directorate Identifier 2012-NM-227-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <a href="http://www.regulations.gov">http://www.regulations.gov</a>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

## **Costs of Compliance**

We estimate that this AD affects 793 airplanes of U.S. registry. (We have confirmed that at least 65 airplanes have the affected configuration; however, there could be as many as 100.)

We estimate the following costs to comply with this AD:

#### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
AFM Revision (100 airplanes)	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$8,500

We have received no definitive data that would enable us to provide cost estimates for the optional terminating action specified in this AD.

# **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII,
Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress
charges the FAA with promoting safe flight of civil aircraft in air commerce by
prescribing regulations for practices, methods, and procedures the Administrator finds
necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

# **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2012-26-51 Airbus**: Amendment 39-17312; Docket No. FAA-2012-1314; Directorate Identifier 2012-NM-227-AD.

## (a) Effective Date

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2012-26-51, issued on December 17, 2012, which contained the requirements of this amendment.

# (b) Affected ADs

None.

### (c) Applicability

This AD applies to Airbus Model A318-111, -112, -121, and -122 airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-111, -211, -212, -214, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes; certificated in any category, all serial numbers.

## (d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 34: Navigation.

## (e) Unsafe Condition

This AD was prompted by a report indicating that an airplane equipped with Angle of Attack (AoA) sensors (with conic plates installed) recently experienced blockage of all sensors during climb, leading to autopilot disconnection and activation of the alpha protection (Alpha Prot) when Mach number was increased. We are issuing this AD to prevent reduced control of the airplane.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Airplane Flight Manual Revision

For airplanes on which an AoA sensor conic plate is installed in production by Airbus modification 153213 or 153214, or in-service as specified in Airbus Mandatory Service Bulletin A320-34-1521, dated May 7, 2012; or Revision 01, dated September 12, 2012: Within 5 days after the effective date of this AD, revise the Emergency Procedures of the Airbus A318/A319/A320/A321 Airplane Flight Manual (AFM) by inserting Airbus A318/A319/A320/A321 Temporary Revision TR286, Issue 1.0, dated December 17, 2012, to advise the flight crew of emergency procedures for addressing AoA sensor blockage. When the information in Airbus A318/A319/A320/A321 Temporary Revision TR286, Issue 1.0, dated December 17, 2012, is included in the general revisions of the AFM, the general revisions may be inserted in the AFM, and the temporary revision may be removed.

# (h) Optional Terminating Action

Modification of an airplane by replacing AoA sensor conic plates with AoA sensor flat plates, in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, constitutes terminating action for the AFM revision required by paragraph (g) of this AD; and after the modification has been done, Airbus A318/A319/A320/A321 Temporary Revision TR286, Issue 1.0, dated December 17, 2012, to the Airbus A318/A319/A320/A321 AFM, may be removed from the AFM.

### (i) Parts Installation Prohibition

As of the effective date of this AD, no person may install an AoA sensor conic plate in service using Airbus Mandatory Service Bulletin A320-34-1521, dated May 7, 2012; or Revision 01, dated September 12, 2012; on any airplane.

# (j) Special Flight Permit

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

### (k) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Branch, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

## (I) Related Information

- (1) For further information about this AD, contact: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-227-1405; fax: 425-227-1149; email: sanjay.ralhan@faa.gov.
- (2) Refer to Mandatory Continuing Airworthiness Information European Aviation Safety Agency Emergency Airworthiness Directive 2012-0264-E, dated December 17, 2012; and Airbus A318/A319/A320/A321 Temporary Revision TR286, Issue 1.0, dated December 17, 2012, to the Airbus A318/A319/A320/A321 AFM; for related information.

# (m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) Airbus A318/A319/A320/A321 Temporary Revision TR286, Issue 1.0, dated December 17, 2012, to the Airbus A318/A319/A320/A321 Airplane Flight Manual.
  - (ii) Reserved.
- (3) For Airbus service information identified in this AD, contact Airbus, Airworthiness Office EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airwortheas@airbus.com; Internet <a href="http://www.airbus.com">http://www.airbus.com</a>.
- (4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <a href="http://www.archives.gov/federal-register/cfr/ibr-locations.html">http://www.archives.gov/federal-register/cfr/ibr-locations.html</a>.

Issued in Renton, Washington, on December 27, 2012.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-31683 Filed 01/08/2013 at 8:45 am; Publication Date: 01/09/2013]